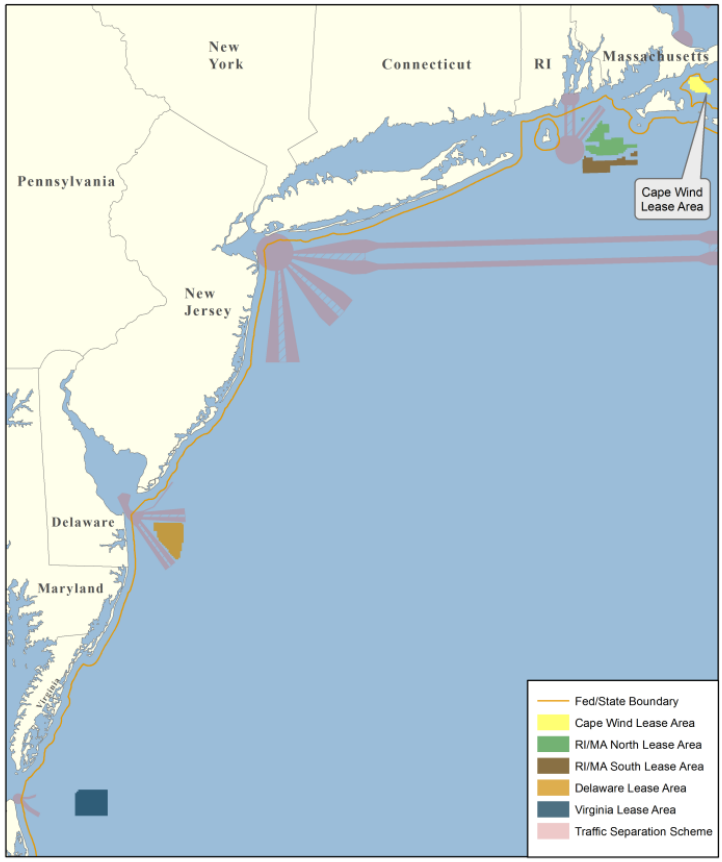
BOEM Bureau of Ocean Energy Management | FACT SHEET

Renewable Energy on the Outer Continental Shelf

In 2009, President Barack Obama announced the final regulations for the Outer Continental Shelf (OCS) Renewable Energy Program, which was authorized by the Energy Policy Act of 2005 (EPAct). These regulations provide a framework for issuing leases, easements and rights-of-way for OCS activities that support production and transmission of energy from sources other than oil and natural gas. Department of the Interior's Bureau of Ocean Energy Management (BOEM) is responsible for offshore renewable energy development in Federal waters and anticipates future development on the OCS from three general sources:

1. Offshore Wind Energy

Wind turbines have been installed offshore a number of countries to harness the energy of the moving air over the oceans and convert it to electricity. Offshore winds tend to flow at higher sustained speeds than onshore winds, making turbines more efficient. In June 2013, President Obama laid out a comprehensive Climate Action Plan that challenged Department of the Interior to permit 20 gigawatts of clean energy on public lands by 2020. Offshore wind development could play a critical role in achieving that goal, given that offshore wind in the United States could produce over 4,000 gigawatts of energy. To date, BOEM has issued five commercial wind energy leases on the OCS, including those offshore Delaware, Massachusetts, Rhode Island, and Virginia (see map). BOEM is considering a number of other commercial wind energy planning areas as well as research lease requests and transmission proposals.



Map: Commercial Wind Energy Lease Areas

2. Ocean Wave Energy (Hydrokinetic)

There is tremendous energy in ocean waves. Wave power devices extract energy directly from the surface motion of ocean waves. A variety of technologies have been proposed to capture that energy, and some of the more promising designs are undergoing demonstration testing. The Northwestern coast of the United States has especially high potential for wave energy development and is one of only a few areas in the world with abundant, available wave power resources. BOEM is currently considering a proposal to test technology that would use wave energy offshore Oregon.

3. Ocean Current Energy (Hydrokinetic)

Ocean currents contain an enormous amount of energy that can be captured and converted to a usable form. Some of the ocean currents on the OCS are the Gulf Stream, Florida Straits Current, and California Current. Submerged water turbines, similar to wind turbines, may be deployed on the OCS in the coming years to extract energy from ocean currents. BOEM is currently considering a proposal to test technology that would use the Florida Straits Current to generate electricity.

For More Information: http://www.boem.gov/Renewable-Energy-Program/index.aspx